

CLAIMS

1. A method for providing advanced intelligent network (AIN) supplementary services between an ITU H.323 endpoint and a service control point (SCP) having service logic programs (SLPs) and transaction capabilities applications part (TCAP) protocol support, the method comprising:

providing an ITU H.450 interface in the SCP, the ITU H.450 interface being capable of communicating with the ITU H.323 endpoint, and

utilizing an ITU H.225 FACILITY message and an ITU H.450 application protocol data unit (APDU) to carry one or more of call-related information, operation codes and AIN messages between the ITU H.323 endpoint and the SCP.

2. The method of claim 1 wherein, in a case in which the AIN supplementary services are not related to an existing ITU H.323 call, the ITU H.225 FACILITY message is empty.

3. The method claim 1 wherein, in a case in which the AIN supplementary services are related to an existing ITU H.323 call, the ITU H.225 FACILITY message is a user-to-user information element (UUIE) including one or more of a setup-UUIE, a connect-UUIE and a releaseComplete-UUIE.

4. Apparatus for supporting advanced intelligent network (AIN) supplementary services in a voice frame network, the apparatus comprising:

an ITU H.450.1 interface to a service control point (SCP), the SCP having also a transaction capabilities applications part (TCAP) interface to the public switched telephone network (PSTN), the SCP providing AIN supplementary services in a network environment compatible with an ITU H.323 endpoint, and

an ITU H.323 endpoint interface for coupling to the ITU H.450 interface over the voice frame network, the ITU H.323 endpoint interface supporting an ITU H.450-based communications protocol.

5. The apparatus of claim 4 wherein said ITU H.450.1 interface takes (the) form of a computer-readable medium containing a program, the program comprising:

an AIN application processes program layer configured to support AIN supplementary services;

an AIN protocol and message set program layer operatively coupled with said application processes program layer;

a H.450.1 APDU program layer operatively coupled with said protocol and message set program layer;

a H.323 protocol program layer operatively coupled with said H.450.1 APDU program layer; and

a H.323 network program layer operatively coupled with said H.323 protocol program layer, said H.323 network program layer being configured for TCP/IP connection with the voice frame network.

6. Apparatus in the form of a computer-readable medium containing a program, the apparatus supporting advanced intelligent network (AIN) supplementary services in a voice frame network, the program comprising:

an ITU H.450.1 interface operatively coupled with a centralized service control point (SCP) having a transaction capabilities applications part (TCAP) interface to a public switched telephone network (PSTN), said ITU H.450.1 interface also operatively coupled with a voice frame network, said ITU H.450.1 interface including:

an AIN application processes program layer configured to support AIN supplementary services;

an AIN protocol and message set program layer operatively coupled with said application processes program layer;

a H.450.1 APDU program layer operatively coupled with said protocol and message set program layer;

a H.323 protocol program layer operatively coupled with said H.450.1 APDU program layer; and

a H.323 network program layer operatively coupled with said H.323 protocol program layer, said H.323 network program layer being configured for TCP/IP connection with the voice frame network.

copy 7. A computer-readable medium containing a program for providing advanced intelligent network (AIN) supplementary services between an ITU H.323 endpoint and a service control point (SCP), the program comprising:

- 5 instructions for communicating with an ITU H.323 endpoint over a voice frame network;
- instructions for communicating with an AIN supplementary services application program layer; and
- 10 instructions for implementing an ITU H.450.1 protocol using one or more application protocol data units (APDUs) to carry one or more of call-related information, operation codes and AIN messages between the ITU H.323 endpoint and the SCP.

15 8. The computer-readable medium in accordance with claim 7 which further comprises:

instructions for utilizing an ITU H.225 FACILITY message and the one or more APDUs to carry the one or more of call-related information, operation codes and AIN messages between the ITU H.323 endpoint and the SCP.

20 9. The computer-readable medium in accordance with claim 8 wherein, in a case in which the AIN supplementary services are not related to an existing ITU H.323 call, the ITU H.225 FACILITY message is empty.

25 10. The computer-readable medium in accordance with claim 8 wherein, in a case in which the AIN supplementary services are related to an existing ITU H.223-call, the ITU H.225 FACILITY message is an ITU H.323-UUIE including one or more of a setup-UUIE, a connect-UUIE and a releaseComplete-UUIE.

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